

## Life Cycle Cost

One of the most effective ways to purchase environmentally preferable items is to incorporate life cycle costing into your bidding practices. Unfortunately, government contracts are often awarded solely for the lowest purchase price. Since the initial purchase price may not reflect the recurring price of energy, operations and maintenance, government agencies can end up with a piece of equipment that costs much more in the long run than a product with a higher purchase price but lower life cycle costs. Agencies can avoid this predicament by using life cycle costing. Life cycle costing computes all of the costs that are incurred during the equipment's service life, and therefore assists agencies in purchasing the most efficient and durable products.

Life cycle costing should always be considered when purchasing systems that consume energy. For example, refrigerators, dish washers, clothes washers, water heaters, air conditioners, heat pumps, furnaces, and boilers are good candidates for life cycle cost comparison to determine low bidder. Because life cycle costing highlights energy efficient technologies that have longer lifetimes, need fewer replacements, and thus require less time for maintenance, it enables government agencies to compare the full costs of ownership for various technologies on the market.

Life cycle costing is effective whether the formula is comprehensive or simple. Life cycle costing can be broken into account:

- ◆ initial costs: purchase price, freight and installation;
- ◆ training costs: preparing employees to use the equipment;
- ◆ energy cost: the annual cost of energy use;
- ◆ operation and maintenance costs: the annual and one-time costs of labor, parts and technological services;
- ◆ life: the length of time the equipment will be used by the agency;
- ◆ salvage value: the cash expected to be obtained from the sale of the product;
- ◆ disposal cost: the cost of the removal of the equipment;
- ◆ escalation rates: the estimated inflation rates of costs; and the
- ◆ discount rate: the rate at which future cash flows are brought back to the present to compare present values of costs and savings.

Or, life cycle costing can also be as simple as the following formula...

<b>Life Cycle Cost =</b>	<b>Initial Cost</b>
	<b>+ Operation/Maintenance Costs</b>
	<b>+ Energy Costs</b>
	<b>+ Disposal Costs</b>
	<b>(or – Salvage Value)</b>